REMARKS

Favorable reconsideration and allowance of this application are requested.

By way of the amendment instructions above, independent claims 53 and 58 have been further amended so as to clarify that the composite material is in contact with the hollow interior. Thus, the "composite material" is now required to form the wall which defines the boundary of the hollow interior and is in contact with such hollow interior.

Claim 56 has been amended so as to address the Examiner's rejection advanced under 35 USC §112.

Therefore, the only issues remaining to be resolved in this application are the Examiner's rejection advanced against claims 53-61 under 35 USC §103(a) as allegedly being unpatentable over Swozil et al in view of Baurmeister, and the rejection advanced against claims 64-67 under 35 USC §103(a) as allegedly being unpatentable over Swozil et al and Baurmeister in view of O'Conner. As will become evident from the discussion below, all claims pending herein are patentable over the applied references of record.

Applicants again respectfully dispute the Examiner's statement that the wall of Swozil is of monolithic construction because it is cast as a single piece. Specifically, to assert that the Swozil wall is monolithic is respectfully submitted to be based on a flawed review of the Swozil disclosure. In this regard, if one reviews the passage in Swozil spanning columns 1 and 2, it is seen immediately that first of all the tube is

produced and ***then*** the remaining components are added. Thus, the wall of the tube of Swozil is ***not*** of a monolithic construction at all.[1]

Even assuming that one completely ignores the tube of Swozil (which would be an entirely inappropriate way to review the Swozil reference), one sees that the fibrous material is coated with a fluorine-containing polymer dispersion covering a tube body with a coat of fibers which is heated to a temperature sufficient for formation of intimate bonds. This structure therefore cannot be regarded as "cast as a single piece" as the Examiner asserts.

The Examiner has acknowledged that Swozil does not teach the presence of fibers which extend longitudinally in a lengthwise direction parallel to the tube axis. He has therefore gone on to combine the teaching of Swozil with that of Baurmeister in order to reject claims 53-61.

In this regard, the Examiner states that Baurmeister discloses a heat exchange tube. Applicants emphatically disagree with such a characterization. Specifically, Baurmeister relates to hollow fiber mats and wound bodies made therefrom. Moreover, the hollow fibers employed in Baurmeister are very different to the glass fibers employed in the heat exchange elements of the present invention.

The only passage which refers to the use of the hollow fiber bodies of Baurmeister can be found at column 5, lines 29-41 which gives examples of the following suitable uses: filters, oxygenators, hemofilters, blood plasma separators, IV filters, cross-flow microfilters, gas separators, membrane distillation devices, bioreactors, adsorbers, absorbers, desorption agents, dialyzers, exchange columns,

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[1] The word "monolithic" is defined as a structure which is "massive, solid and ***uniform***". See, http://www.answers.com/topic/monolithic.

packing packed columns, controlled slow release of active substances, odorous substances and the like etc.

Since Baurmeister is restricted totally to the use of hollow fibers -- i.e. where fluid passes physically through the hollow fibers -- Baurmeister would not be considered relevant at all by the skilled person in connection with an elongate tubular heat transfer element of the kind of the present invention in which the fluid passes through the hollow interior of the monolithic structure. In this regard, it will of course be understood that heat exchange is a complicated phenomena. The structure of Baurmeister in incapable of removing large amounts of energy. The structure of Baurmeister is itself permeable. It is particularly noted that there is nothing in Baurmeister to suggest that the hollow fibers should be embedded in a matrix. Indeed, the reference to "mat" in Baurmeister implies that no matrix is present. Thus, if one of ordinary skill in the art was to look to Baurmeister for inspiration, he would be taught that he should use hollow fibers and that they should not be embedded in a matrix.

It is also noted that Baurmeister is clearly not intended to be a structural member of the hollow pipe variety. This is in contrast to the arrangement of the present invention.

Therefore, even if Baurmeister were to be combined with Swozil, the present invention would not result. Withdrawal of the rejection advanced against claims 53-61 is therefore in order.

Applicants note that O'Connor is being combined with Swozil et al and Baurmeister for its teaching of employing metal particulates in combination with plastics material. Applicants again reiterate that they are not claiming to be the first inventors of incorporating metal particulates in combination with plastics material generally. Thus, even if O'Connor were to be combined with Swozil and Baurmeister, the present invention would not result for the reasons stated above and previously on the record.

Every effort has been made to advance prosecution of this application to allowance. Therefore, in view of the amendments and remarks presented above and during prosecution to date, applicants suggest that this application is in condition for prompt allowance. Early Official Notice of the same is therefore solicited.

Respectfully submitted,

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